

ABSTRACT

A two piece, two-stage, rechargeable, reusable, reduced-energy mechanically operating cartridge is provided for launching a bullet of various compositions from a dedicated or modified firearm. The cartridge unit is comprised of a primary case, a piston sleeve, a propellant unit, and a bullet choice of a solid light weight material for inanimate-target applications or a "marking" version for non-lethal live-target training applications. Cartridge includes a piston sleeve and a primary case coupled together via a channel and cog locking/traveling/unlocking system. The primary case includes a substantially non-deformable jacket defining a cavity to receive a propellant unit or propellant connection and provides the channels to receive piston sleeves cogs for a locking/traveling/unlocking feature. The piston sleeve includes a substantially non-deformable jacket defining a cavity to receive configured bullet. The primary case also includes a substantially non-deformable jacket for being axially coupled with the piston sleeve, and for coupling with a propellant mechanism. Upon activation of the mechanically operating cartridge within the chamber of the firearm during stage 2, the piston sleeve and primary case telescope apart from a compressed, static, stage 1 position forcing the firearm's slide or bolt to the rear, a mechanical operation opposed to a conventional cartridge with gas blow back operations. Spent cartridge is reused by manually separating piston sleeve from primary case as to remove spent propellant unit with removal tool, recharged with new propellant unit reloaded with choice of bullet composition and placed into magazine or similar for firearm loading.